

Split

shp Oct 25

Work Order ID 91376-1

91376

Page 1

October-05-12 11:31:30 AM

Item ID: D4410-043

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Co-Pilot Collective Head Assembly (212)

Start Date: 10/05/12 Start Qty: 4.00

4

Cust Item ID:

Required Date: 10/12/12 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan: MLS

Date: 12-10-05 Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D4410

REV B

100

Manufacture as per dwg

0.00

100

Mill Conv

Memo

0.00

Conventional Milling Machine

ON D4410-1, RE-DRILL & REAM AS PER D4410-043, NOTE #9

USE DT9777B COMPOUND ANGLE BLOCK

101

QC5- Inspect part completeness to step on W/O

0.00

101

QC

Memo

0.00

Quality Control

110

Weld per dwg A/R Aluminum rod Batch: M120854

0.00

110

Large Fab

Memo

0.00

Large Fab

WELD D4410-7, D4410-1 & D4410-15 AS PER DWG

GRIND WELD FLUSH WHERE INDICATED AS PER DWG.

①

Q 12-10-22

Work Order ID 91376



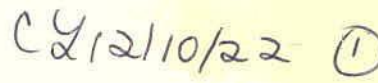
October-05-12 11:31:30 AM

91376

Page 2

Item ID: D4410-043 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Co-Pilot Collective Head Assembly (212)
 Start Date: 10/05/12 Start Qty: 4.00 ***4*** Cust Item ID:
 Required Date: 10/12/12 Req'd Qty: 4.00 ***4*** Customer:
 Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC9- Inspect visual per QSI004- Fusion Welds Memo	0.00 0.00							
130 *130* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00							
140 *140* Outsource4 Outsource process - Anodize	Outsource process-Anodize per QSI017 4.1.10.1 Memo Issue P/O: <u>18206</u> Black Anodize as per Dwg D4410	0.00 0.00							

Work Order ID 91376

October-05-12 11:31:30 AM

91376

Page 3

Item ID: D4410-043
 Revision ID:
 Item Name: Co-Pilot Collective Head Assembly (212)
 Start Date: 10/05/12 Start Qty: 4.00
 Required Date: 10/12/12 Req'd Qty: 4.00
 Reference:

Accept ***N9000040100*** Setup Start ***NS1***
 Stop ***NS2***

Cust Item ID:
 Customer:

Approvals: Process Plan: Date: Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

150

Receive & Inspect for Damage & Mat'l Certs

0.00

150

Packaging

Memo

0.00

Packaging

Ref 4/4/04 @

160

QC3- Inspect Part Finish

0.00

160

QC

Memo

0.00

Quality Control

DAS 15

12/10/25

170

0.00

170

Small Fab

Memo

0.00

Small Fab

ASSEMBLE AS PER DWG,
 RE-PASS HELICOIL TAP IN THREADS

A/R: PROSEAL 890 OR EQUIVALENT

BATCH #: *119485*

4 9

FF 12-10-29

Work Order ID 91376

October-05-12 11:31:30 AM

91376

Page 4

Item ID: D4410-043

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Co-Pilot Collective Head Assembly (212)

Start Date: 10/05/12 Start Qty: 4.00 ***4***

Cust Item ID:

Required Date: 10/12/12 Req'd Qty: 4.00 ***4***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID Tool # Plan Code Accept Qty Reject Qty Reject Number Insp. Stamp

180

QC5- Inspect part completeness to step on W/O

0.00

180

QC

Memo

0.00

Quality Control

DAS
15
12-10-29

190

Identify as per dwg & Stock Location: 198

0.00

190

Packaging

Memo

0.00

Packaging

(4)

12/10/29sf

200

QC21- Final Inspection - Work Order Release

0.00

200

QC

Memo

0.00

Quality Control

12/10/31 JF

MF

12-10-01

Picklist Print

October-05-12 11:31:29 AM

Page 1

Work Order ID: 91376

Parent Item: D4410-043

Parent Item Name: Co-Pilot Collective Head Assembly (212)

Start Date: 10/05/12

Required Date: 10/12/12

Start Qty: 4.00

Required Qty: 4.00

Comments:

IPP REV:A NEW ISSUE 11-11-02 JLM VERIFIED BY:DD
12/08/10 JFS VERIFIED BY:JLM
IPP REV:B AS PER REV:PB6
IPP REV:C AS PER REV:PB10 12/09/20 JFS VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4410-1 Co-Pilot Collective Head		Manufactured	No		91385 x1	100	Each	0.0000	1	4			
D4410-7 Conduit		Manufactured	No			110	Each	0.0000	1	4			
D4410-13 Shim (212)		Manufactured	No		91386 x1 91370	170	Each	1.0000	1	4			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ENG		1							
D4410-15 Rear Cover		Manufactured	No		88987	110	Each	1.0000	1	4			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				S		1							
D4413-1 Dome Plug		Manufactured	No		90611	170	Each	5.0000	1	4			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST110	B91375	5							
				80844		5							
90296A108 Heli-Coil Insert		Purchased	No			170	Each	23.0000	4	16			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				enc		23							
					120040	3							
					123120	20							

D4410-041 x3 91379

EL 12-10-22

EL 12-10-22

4 FF 12-10-29

EL 12-10-22

FF 12-10-29

FF 12-10-29

16

Picklist Print

October-05-12 11:31:29 AM

Page 2

Work Order ID: 91376

Parent Item: D4410-043

Parent Item Name: Co-Pilot Collective Head Assembly (212)

Start Date: 10/05/12

Required Date: 10/12/12

Start Qty: 4.00

Required Qty: 4.00

MS171599

Purchased

No

170

Each

30.0000

1

4

Pin

FF 12-10-29

Location

Loc Qty

Loc Code

ST331

30

123183

30

#

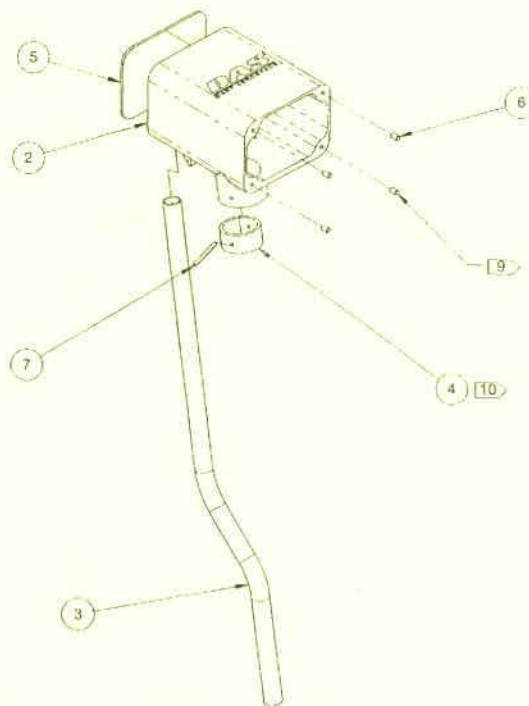
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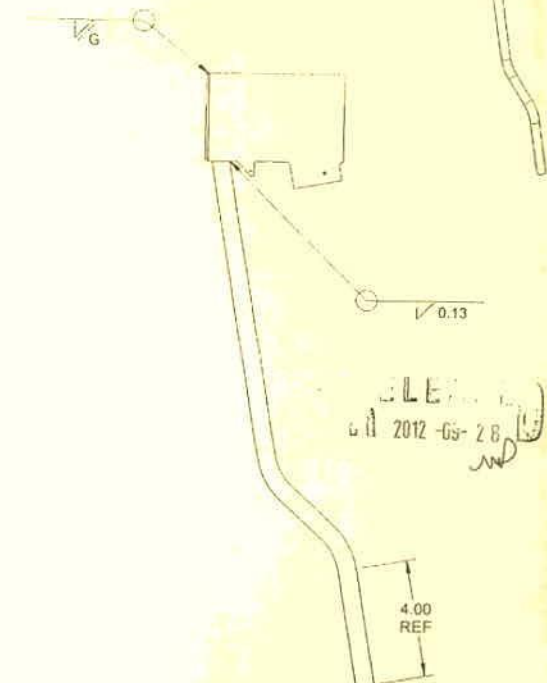
Shop Packet Print

Page 2

ITEM NO.	QTY. -041	PART NUMBER	DESCRIPTION
1	X	D4410-041	CO-PILOT COLLECTIVE HEAD ASSEMBLY (205)
2	1	D4410-1	CO-PILOT COLLECTIVE HEAD
3	1	D4410-7	CONDUIT
4	1	D4410-11	205 SHIM
5	1	D4410-15	REAR COVER
6	4	90296A108	HELI-COIL INSERT (6-32 X 0.276)
7	1	MS171539	PIN



D4410-041 CO-PILOT COLLECTIVE HEAD ASSEMBLY (205)



**D4410-041 WELDING DETAIL
(-041 SHOWN, -043/-045 SIMILAR)**

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2 AFTER WELDING
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 1.55 lbs
- 8) WELD PER DART QSI 004
- 9) INSTALL AFTER ANODIZING
- 10) INSTALL AFTER ANODIZING WET WITH PROSEAL 890 OR EQUIVALENT ENSURE THAT PROSEAL DOES NOT CONTACT PIN

B	ADD C/BORE, ZN A4-2 ENLARGE HOLES, ZN C5-3 & B8-3, UPDATE LOGO, ADD -043/-11/-13/-15, ROTATE HOLE, ZN C3-2 INCREASE -7 DIAMETER, ZN C1-6 REMOVE -9 FROM -041 ASSEMBLY, ZN C5-1	DC	12.07.30
A	NEW ISSUE	DC	11.06.06
REV	DESCRIPTION	BY	DATE
DESIGN	DC		
DRAWN	DC		
CHECKED	DC		
MFG. APPR.	DC		
APPROVED	DC		
DE APPR.	DC		
DATE	12.07.30		

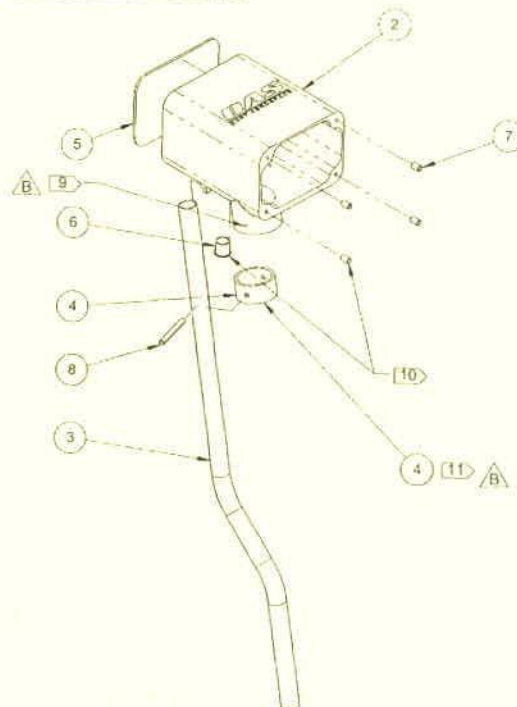
DART AEROSPACE USA, INC.
KENT, WA

DRAWING NO. **D4410** REV. B
SHEET 1 OF 12

TITLE **CO-PILOT COLLECTIVE HEAD** SCALE NTS

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ITEM NO.	QTY.	PART NUMBER	DESCRIPTION
1	X	D4410-043	CO-PILOT COLLECTIVE HEAD ASSEMBLY (212)
2	1	D4410-1	CO-PILOT COLLECTIVE HEAD
3	1	D4410-7	CONDUIT
4	1	D4410-13	212 SHIM
5	1	D4410-15	REAR COVER
6	1	D4413-1	DOME PLUG
7	4	90296A108	HELI-COIL INSERT (6-32 X 0.276)
8	1	MS171599	PIN



D4410-043 CO-PILOT COLLECTIVE HEAD ASSEMBLY (212)

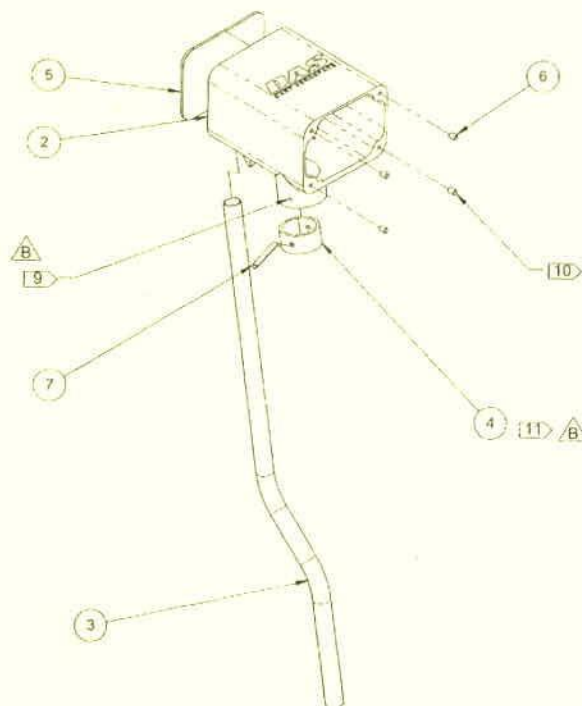
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2 AFTER WELDING
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 1.55 lbs
- 8) WELD PER DART QSI 004
- 9) REAM TO Ø0.177 (DRILL #16)
- 10) INSTALL AFTER ANODIZING
- 11) INSTALL AFTER ANODIZING WET WITH PROSEAL 890 OR EQUIVALENT ENSURE THAT PROSEAL DOES NOT CONTACT PIN

RELEASE
LU 2012-09-28
NDL

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CHECKED	DC	DRAWING NO.	REV. B
MFG. APPR.	DC	D4410	SHEET 2 OF 12
APPROVED	DC	TITLE	SCALE
DE APPR.	DC	CO-PILOT COLLECTIVE HEAD	NTS
DATE	12.07.30	COPYRIGHT © 2011 BY DART AEROSPACE USA, INC.	

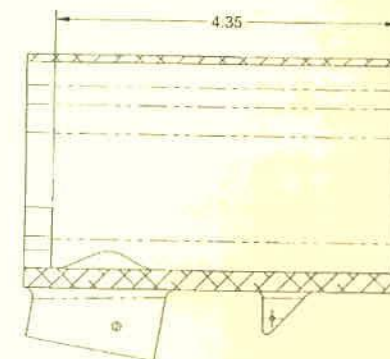
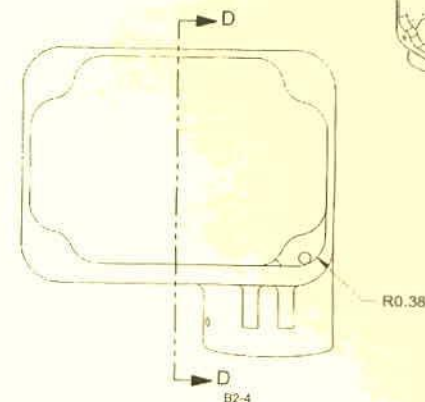
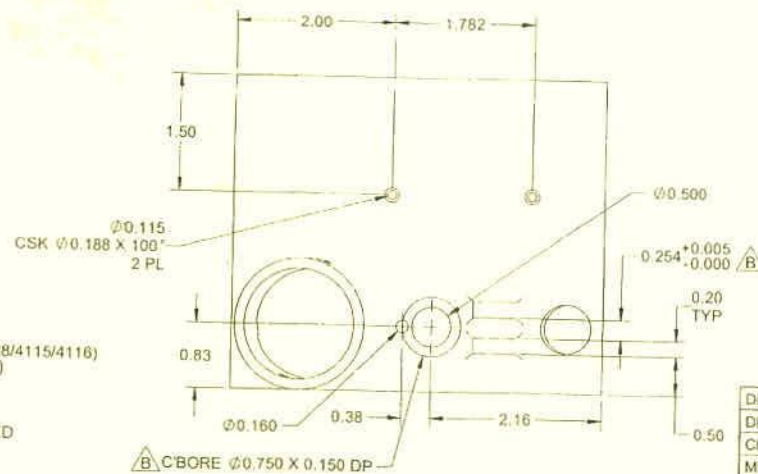
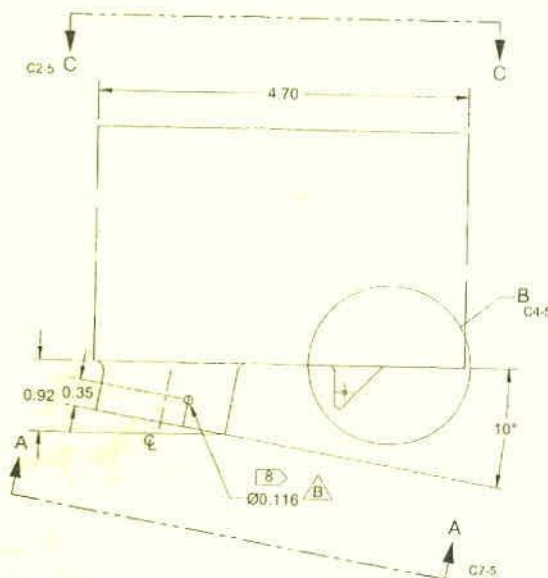
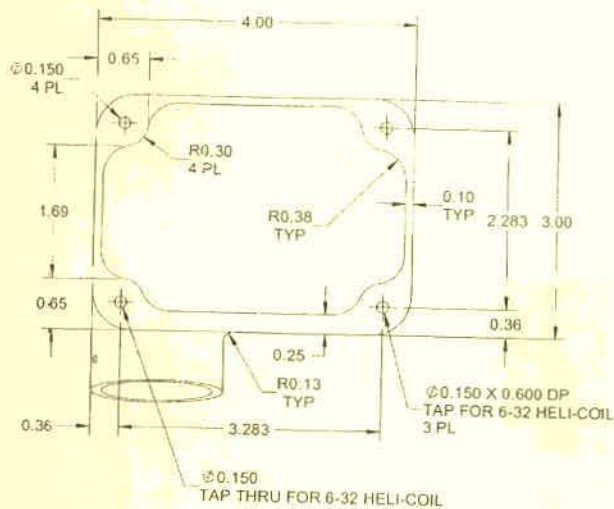
ITEM NO.	QTY. -045	PART NUMBER	DESCRIPTION
1	X	D4410-045	CO-PILOT COLLECTIVE HEAD ASSEMBLY (EAGLE SINGLE)
2	1	D4410-1	CO-PILOT COLLECTIVE HEAD
3	1	D4410-7	CONDUIT
4	1	D4410-13	212 SHIM
5	1	D4410-15	REAR COVER
6	4	90296A108	HELI-COIL INSERT (6-32 X 0.276)
7	1	MS171599	PIN



**D4410-045 CO-PILOT COLLECTIVE HEAD ASSEMBLY
(EAGLE SINGLE)**

- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2 AFTER WELDING
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
 - 7) WEIGHT: 1.55 lbs
 - 8) WELD PER DART QSI 004
 - 9) REAM TO Ø0.177 (DRILL #16)
 - 10) INSTALL AFTER ANODIZING
 - 11) INSTALL AFTER ANODIZING WET WITH PROSEAL 890 OR EQUIVALENT ENSURE THAT PROSEAL DOES NOT CONTACT PIN

DESIGN	DC	DART AEROSPACE USA, INC.	
DRAWN	DC	KENT, WA	
CHECKED	SE	DRAWING NO.	REV. B
MFG. APPR.	SA	D4410	SHEET 3 OF 12
APPROVED	SA	TITLE	SCALE
DE APPR.	SA	CO-PILOT COLLECTIVE HEAD	NTS
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SECTION D-D
D2-4

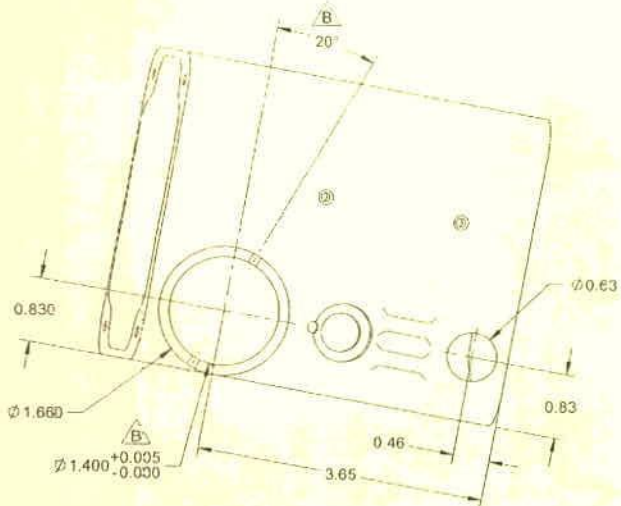
NOTES:

- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR:
QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
REF. DART SPEC. M6061T6B4 000X3.000
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 1.24 lbs
- 8) HOLE IS ROTATED 20° COUNTER-CLOCKWISE WHEN VIEWED FROM ABOVE

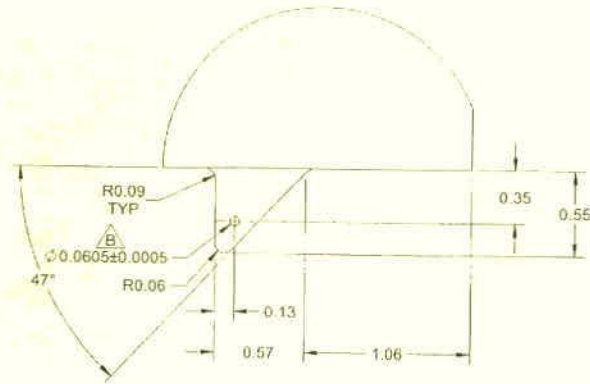
D4410-1 CO-PILOT COLLECTIVE HEAD

DESIGN	PL	DART AEROSPACE USA, INC.	REV. B
DRAWN	PL	KENT, WA	
CHECKED	PL	DRAWING NO. D4410	SHEET 4 OF 12
MFG. APPR.	PL	TITLE	SCALE
APPROVED	PL	CO-PILOT COLLECTIVE HEAD	NTS
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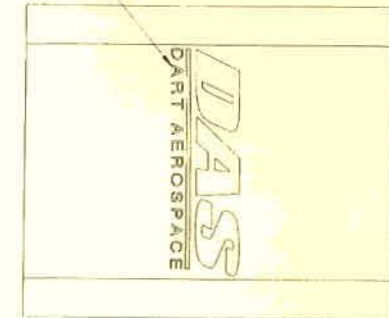
91376



VIEW A-A
C5-4



DETAIL B
C4-4



VIEW C-C
D4-4

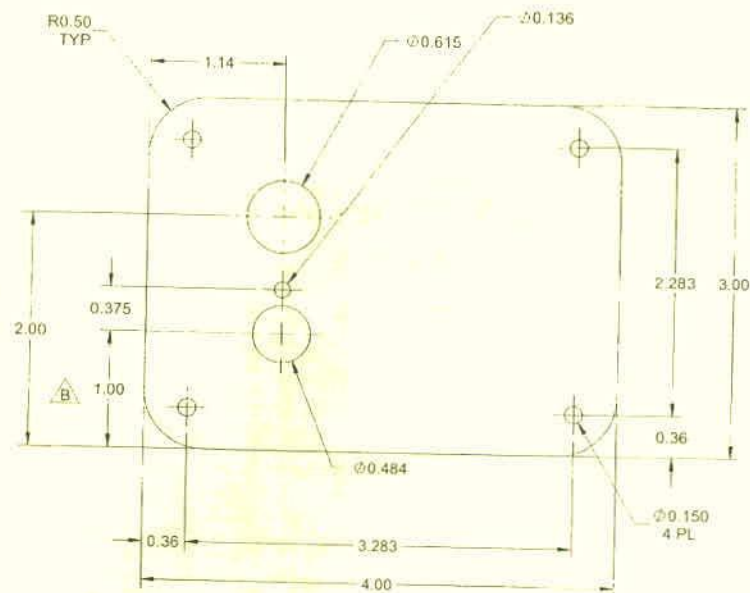
**D4410-1 CO-PILOT COLLECTIVE HEAD
DETAIL VIEWS**

RELEASED
2012-09-28

- NOTES:**
- 1) MATERIAL: N/A
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: N/A
 - 8) ENGRAVE "DAS" LOGO AS SHOWN 0.003 - 0.005 DP.

DESIGN	BC	DART AEROSPACE USA, INC.	
DRAWN	BC	KENT, WA	
CHECKED	BC	DRAWING NO.	REV. B
MFG. APPR.	BC	D4410	SHEET 5 OF 12
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D4410-3 FACE PLATE

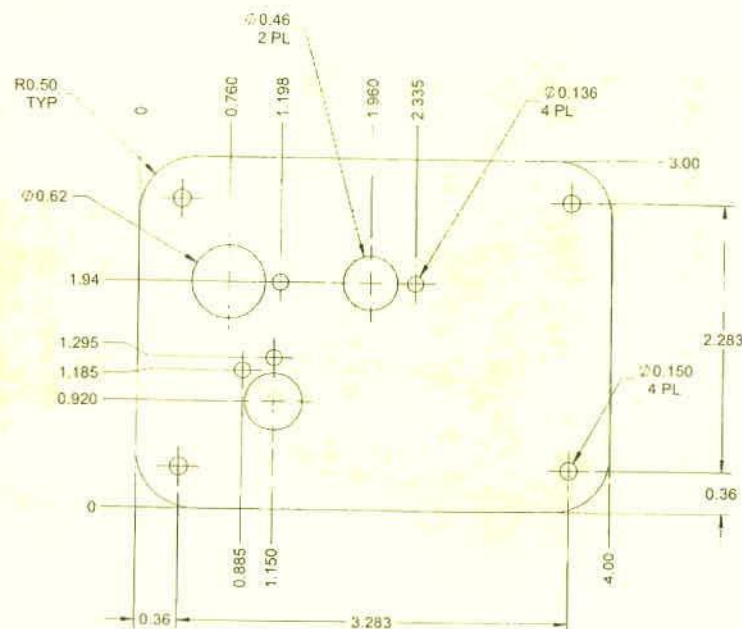
NOTES:

- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET, 0.040 THK
QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027
OR ASTM B209
REF. DART SPEC. M0061T6S.040
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.04 lbs

DESIGN	DL	DART AEROSPACE USA, INC.	
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CHECKED	DL	DRAWING NO.	REV. B
MFG. APPR.	DL	D4410	SHEET 6 OF 12
APPROVED	DL	TITLE	SCALE
DE APPR.	DL	CO-PILOT COLLECTIVE HEAD	NTS
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D4410-5 FACE PLATE

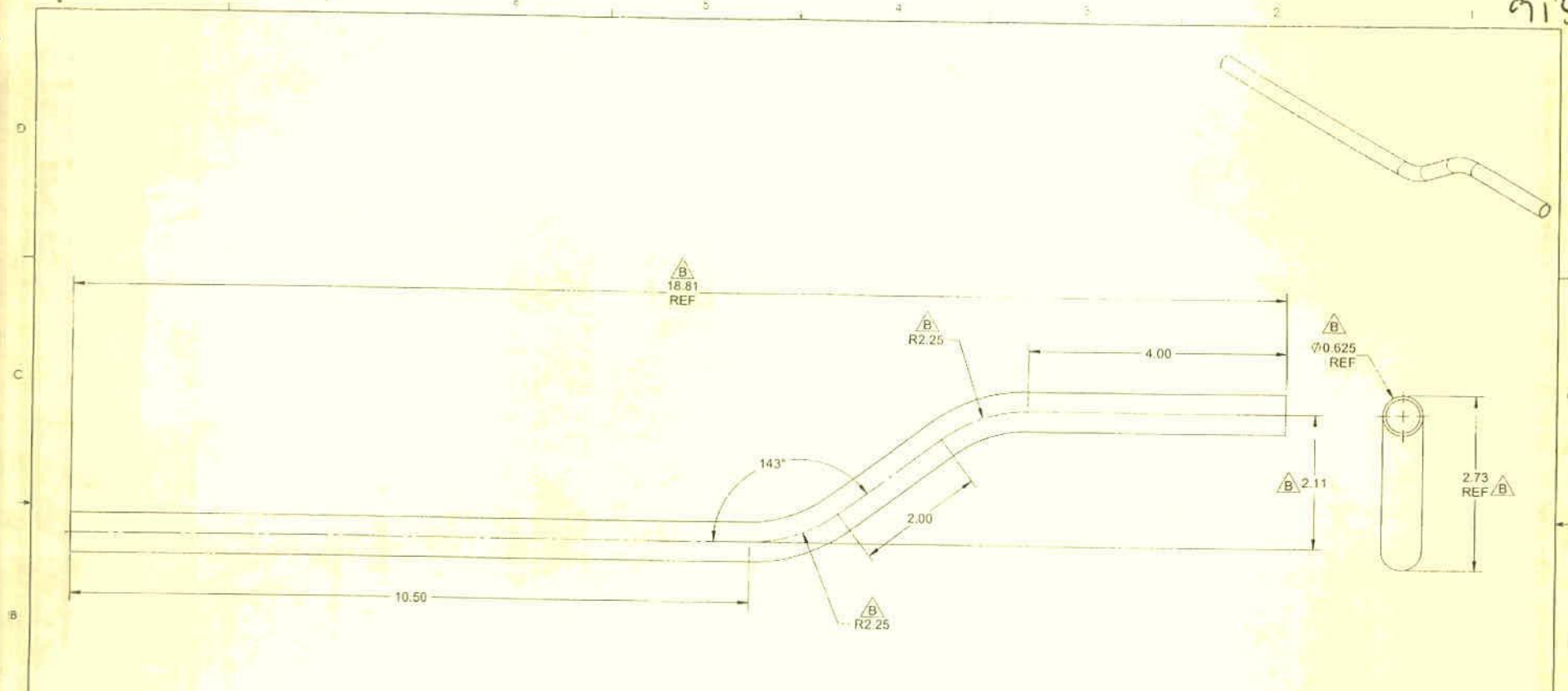
NOTES:

- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET, 0.040 THK
QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027
OR ASTM B209
REF. DART SPEC. M6061T6S.040
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.04 lbs

RELEASED
2012-09-28

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DRAWN	DC	KENT, WA	
CHECKED	DC	DRAWING NO.	REV. B
MFG. APPR.	DC	D4410	SHEET 7 OF 12
APPROVED	DC	TITLE	SCALE
DE APPR.	DC	CO-PILOT COLLECTIVE HEAD	NTS
DATE	12.07.30	COPYRIGHT © 2011 BY DART AEROSPACE USA, INC.	

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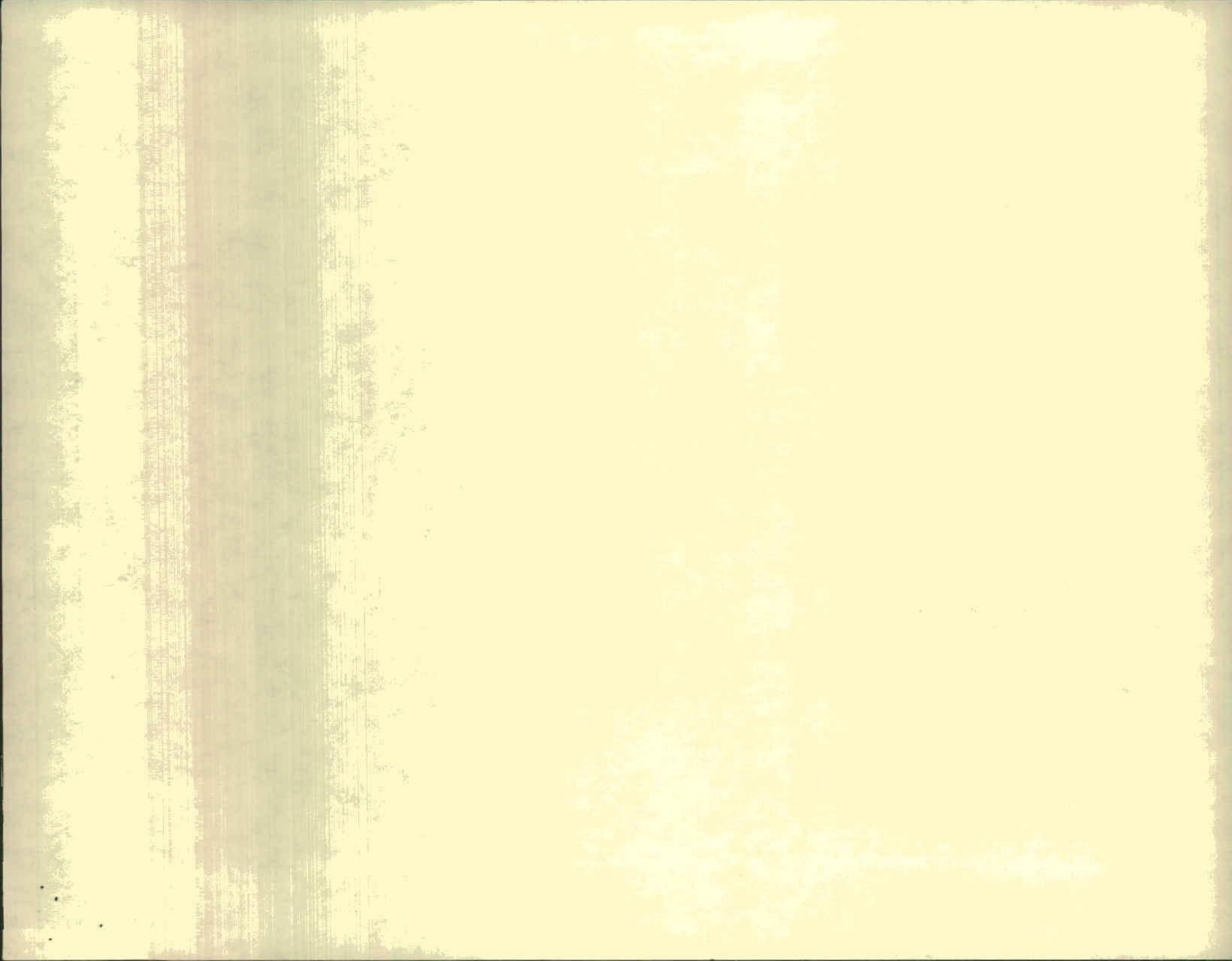


D4410-7 CONDUIT

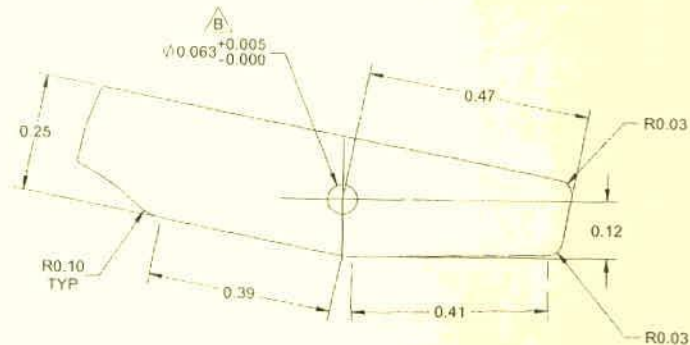
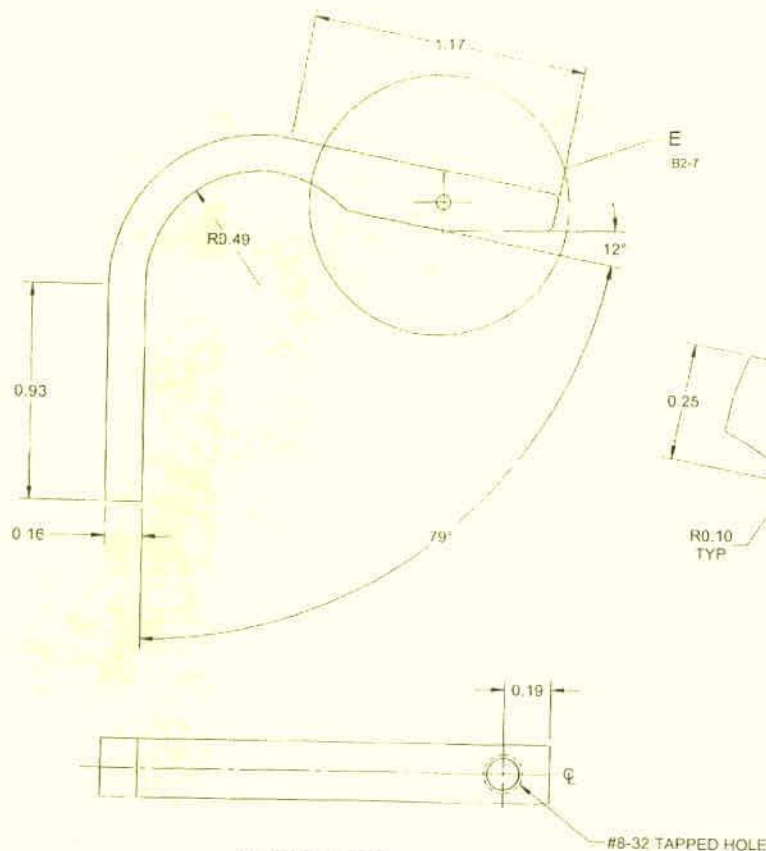
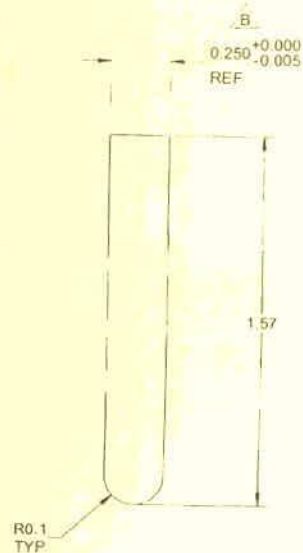
RELEASE
2012-09-26
JWP

- NOTES:
- 1) MATERIAL: 6061-T6 OR 6061-T62 ALUMINUM TUBING PER WW-T-700/6 OR AMS 4080 OR AMS 4082 OR QQ-A-200/8 OR QQ-A-225/8 REF. DART SPEC. M6061T60.625W.050 $\triangle B$
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
 - 7) WEIGHT: C. 17 lbs

DESIGN	BC	DART AEROSPACE USA, INC. KENT, WA	
DRAWN	BC		
CHECKED	BC	DRAWING NO.	REV. B
MFG. APPR.	BC	D4410	SHEET 8 OF 12
APPROVED	BC	TITLE	SCALE
DE APPR.	BC	CO-PILOT COLLECTIVE HEAD	NTS
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91376



DETAIL E
D4-7

D4410-9 TRIGGER

#8-32 TAPPED HOLE

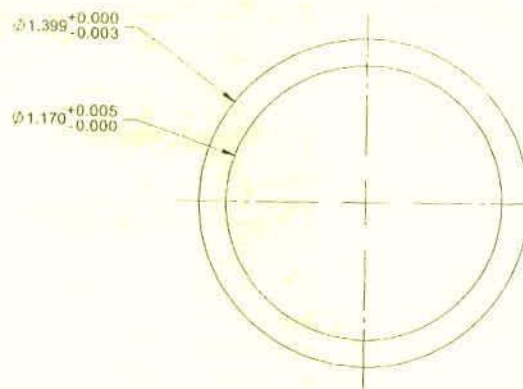
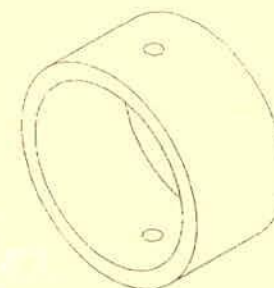
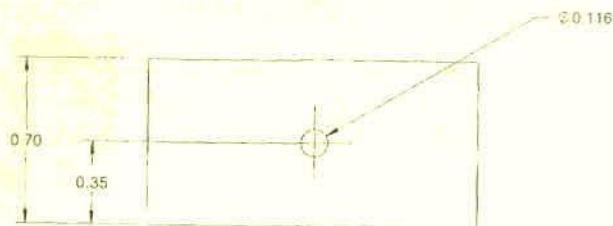
NOTES:

- 1) MATERIAL: 9061-T6/T62 ALUMINUM SHEET, 0.250 THK
QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027
OR ASTM B209
REF. DART SPEC. M6061T6S.250
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.01 lbs

RELEASED
2012-09-23

DESIGN	D4	DART AEROSPACE USA, INC. KENT, WA	
DRAWN	D4		
CHECKED	D4	DRAWING NO.	REV. B
MFG. APPR.	D4	D4410	SHEET 9 OF 12
APPROVED	D4	TITLE	SCALE
DE APPR.	D4	CO-PILOT COLLECTIVE HEAD	NTS
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91376



D4410-11 205 SHIM

RELEASED
2012-09-23
AMP

NOTES:

- 1) MATERIAL: 6061-T6/T651/T6511/T62 ALUMINUM ROUND BAR
QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
REF. DART SPEC. M6061T6R1.500
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.03 lbs

DESIGN	BC	DART AEROSPACE USA, INC.	
DRAWN	BC	KENT, WA	
CHECKED	BC	DRAWING NO.	REV. B
MFG. APPR.	BC	D4410	SHEET 10 OF 12
APPROVED	BC	TITLE	SCALE
DE APPR.	BC	CO-PILOT COLLECTIVE HEAD	NTS
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NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

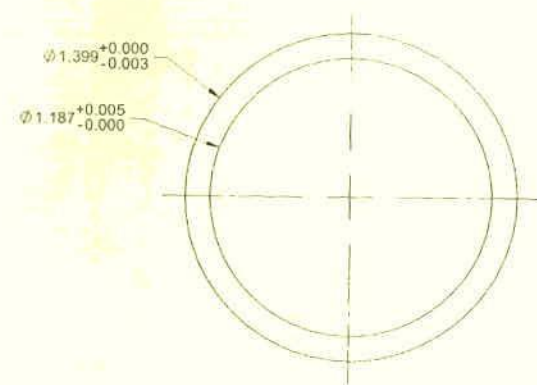
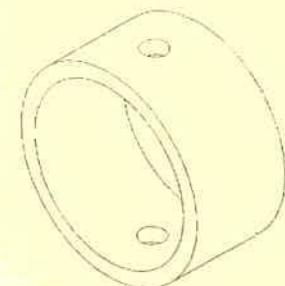
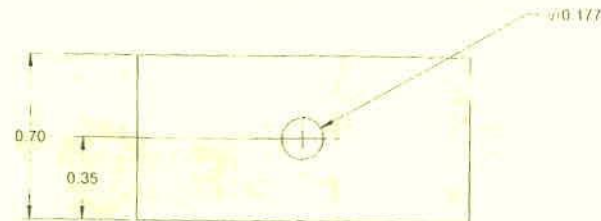
Work Order: _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS			
Part No. _____		Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>
NCR No. _____		Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Corr. <input type="checkbox"/>	Quality <input type="checkbox"/>
		Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>
		Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear	General		
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<input type="checkbox"/> Ovalized
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware	<input type="checkbox"/> Over/Under tolerance
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Part Incorrect
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Lost/Missing
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Part Moved
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Misabeled	<input type="checkbox"/> Positioned Wrong
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread	<input type="checkbox"/> Power Loss/Surge
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset	<input type="checkbox"/> Pressure/Forced
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration	<input type="checkbox"/> Temperature/Cure
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Weld
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Wrong Stock Pulled
			<input type="checkbox"/> Other

91376



D4410-13 212 SHIM

- NOTES:**
- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR
 QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
 OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
 OR ASTM B211 OR ASTM B221
 REF. DART SPEC. M0061T6R1.500
 - 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
 - 7) WEIGHT: 0.03 lbs

RELEASED
 2012-09-28
 WMD

DESIGN	BC	DART AEROSPACE USA, INC.	
DRAWN	BC	KENT, WA	
CHECKED	BC	DRAWING NO.	REV. B
MFG. APPR.	BC	D4410	SHEET 11 OF 12
APPROVED	BC	TITLE	SCALE
DE APPR.	BC	CO-PILOT COLLECTIVE HEAD	NTS
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NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

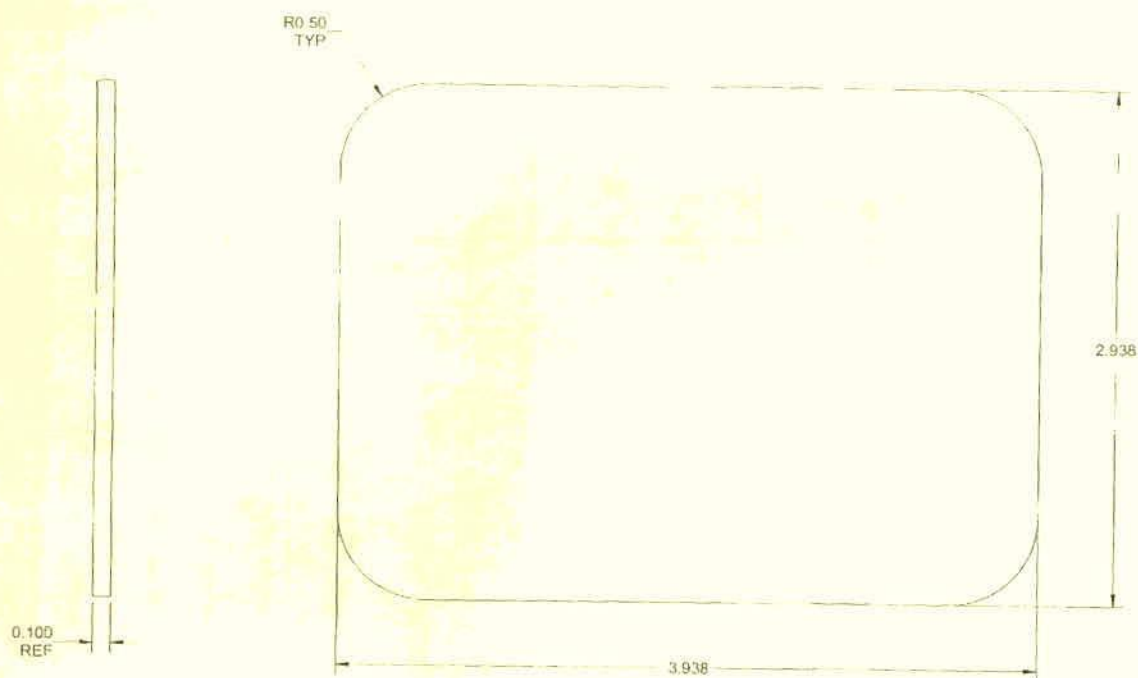
Work Order: _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS			
Part No. _____		Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>
NCR No. _____		Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>
		Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>
		Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	


Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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91376



 **D4410-15 REAR COVER**

NOTES:

- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET, 0.100 THK
 QQ-A-250/11 OR AMS-QQ-A-250/11
 OR AMS 4025 OR AMS 4027
 OR ASTM B209
 REF. DART SPEC. M5061T6S.100
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.11 lbs

DESIGN	BC	DART AEROSPACE USA, INC.	
DRAWN	BC	KENT, WA	
CHECKED	BC	DRAWING NO.	REV. B
MFG APPR.	BC	D4410	SHEET 12 OF 12
APPROVED	BC	TITLE	SCALE
DE APPR.	BC	CO-PILOT COLLECTIVE HEAD	NTS
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NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">Skid-tube <input type="checkbox"/></td> <td style="width: 33%;">Crosstube <input type="checkbox"/></td> <td style="width: 33%;">Water Jet <input type="checkbox"/></td> <td style="width: 33%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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A.T.G. Industries Inc.
731, rue Industrielle Rd.
PLATING DEPARTMENT
Rockland, On K4K 1T2
Canada
Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 61997

Date: 23-Oct-12

To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ship To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via	
Quantity	Description		
1 lot	Part: ASST 3 PCS D4410-041 1 PC D4410-043 4 PCS D4410-13 10 PCS D4410-11 12 PCS D4410-9 BLACK ANODIZE MIL-A-8625 TYPE 2 CLASS 2 Job: 20120643	Rev:	PO: PO18206
Certificate of Conformance			
A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order.			
ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY			
DATE: 23/10/12			
CERTIFIED SIGNATURE : _____			
RECEIVER SIGNATURE : _____			

